

ABSTRACT OF THE DISCLOSURE

A non-metallic element system is provided which can effectively seal or pack-off an annulus under elevated temperatures. The element system can also resist high differential pressures without sacrificing performance or suffering mechanical degradation, and is considerably faster to drill-up than a conventional element system. In one aspect, the composite material comprises an epoxy blend reinforced with glass fibers stacked layer upon layer at about 30 to about 70 degrees. A downhole tool, such as a bridge plug, frac-plug, or packer, is also provided. The tool comprises a first and second support ring having one or more tapered wedges, a first and second expansion ring, and a sealing member disposed between the expansion rings and the support rings.

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